

Please amend claims 1-17 as follows:

1. (Amended) An arrangement [Arrangement] for predicting an abnormality of a dynamic system and for implementing an action opposing the abnormality, comprising:

- 5 a) [whereby] a measured data pick-up [is provided] that registers comparison measured data of said [the] system and test measured data of said [the] system; [,]
- b) [comprising] a processor unit, having a neural network that models said system, said processor unit [that is configured such that the following steps can be implemented:]
- 10 [c)] (1) training said [a] neural network [that describes the system is trained upon employment of] using said [the] comparison measured data;
- 15 (2) determining a comparison information flow that describes a comparison dynamic of said [the] system [is determined upon employment of] using said [the] trained neural network;
- 20 (3) determining a test information flow that describes a test dynamic of said [the] system [is determined upon employment of] using said [the] test measured data;
- 25 (4) [upon employment of] using said [the] comparison information flow and [of] said [the] test information flow, predicting said [the] abnormality [is predicted] as established when said [the] comparison information flow differs significantly from said [the] test information flow and predicting said [the] abnormality [is predicted] as not established when said [the] comparison information flow does not significantly differ from said [the] test information flow;

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A14

- (5) when said [the] abnormality of the system has been predicted as established, then implementing said [the] action [is implemented]; and
- c) [whereby] an actuator that implements said [the] action [is provided].

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2. (Amended) An arrangement [Arrangement] according to claim 1, wherein said [whereby the steps (2) and (5) of the] processor unit endlessly loops from said step of determining a comparison information flow to said step of implementing said action [form an endless loop].

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3. (Amended) An arrangement [Arrangement] according to claim 1 [or 2], wherein said [whereby the] abnormality is predicted as established when said test information flow is significantly smaller than said [the] comparison information flow.

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4. (Amended) An arrangement [Arrangement] according to claim 3, wherein said [whereby the] action comprises [is comprised in] exciting said [the] system with a chaotic signal.

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5. (Amended) An arrangement [Arrangement] according to claim 4, wherein said [whereby the] action comprises supplying [is comprised in supplying] noise to said [the] system.

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A19

6. (Amended) An arrangement [Arrangement] according to claim 5, wherein said [whereby the] noise is supplied by [on the basis of] a corresponding electrical field.

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7. (Amended) An arrangement [Arrangement] according to claim 6,
wherein said [whereby the] electrical field is supplied by [on the basis of] at least
one electrode.

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A21

5 8. (Amended) An arrangement [Arrangement] according claim 5,
wherein said [whereby the] noise is supplied by [on the basis of] a corresponding
magnetic field.

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A22

9. (Amended) An arrangement [Arrangement] according to claim 8,
wherein said [whereby the] magnetic field is supplied by [on the basis of] at least
one electrode.

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A23

10. (Amended) An arrangement [Arrangement] according to claim 1
[or 2], wherein said [whereby the] abnormality is predicted as established when
said test information flow is significantly greater than said [the] comparison
information flow.

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15 11. (Amended) An arrangement [Arrangement] according to claim 10,
wherein said [whereby the] action comprises [is comprised in] exciting said [the]
system with a regular signal.

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A25

12. (Amended) An arrangement [Arrangement] according to claim 11,
wherein said [whereby the] regular signal is supplied by [on the basis of] an
electrical field.

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A26

13. (Amended) An arrangement [Arrangement] according to claim 11,
wherein said [whereby the] electrical field is supplied by [on the basis of] at least
one electrode.

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A27

14. (Amended) An arrangement [Arrangement] according to claim 11,
wherein said [whereby the] regular signal is supplied by [on the basis of] a
magnetic field.

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A28

15. (Amended) An arrangement [Arrangement] according to claim 14,
wherein said [whereby the] magnetic field is supplied to said [the] system by [on
the basis of] at least one electrode.

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16. (Amended) A method [Method] for predicting an abnormality of a
dynamic system and for implementing an action opposing the abnormality,
[whereby] comprising the steps of:

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- a) measuring comparison measured data of said [the] system and test
measured data of said [the] system₁ [are measured,]
- b) determining a neural network that models said [describes the] system
[is determined upon employment of] using said [the]
comparison measured data;
- c) determining a comparison information flow that describes a
comparison dynamic of said [the] system [is determined upon
employment of] using said [the] neural network;
- d) determining a test information flow that describes a test dynamic of
said [the] system [is determined upon employment of] using
said [the] test measured data;
- e) comparing said comparison information flow to said test information
flow [e] upon employment of] using said [the] comparison
information flow and of said [the] test information flow₁ [,]
- f) determining said [the] abnormality to be [is] predicted as established
when said [the] comparison information flow differs
significantly from said [the] test information flow₁ [and]
- g) determining said [the] abnormality to be [is] predicted as not
established when said [the] comparison information flow does

not significantly differ from said [the] test information flow; and

h) [f)] implementing said action when said [the] abnormality of said [the] system has been predicted as established[, then the action is implemented].

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17. (Amended) A method [Method] for predicting an abnormality of a dynamic system, comprising the steps of: [whereby]

a) measuring comparison measured data of said [the] system and test measured data of said [the] system; [are measured,]

b) determining a comparison information flow that describes a comparison dynamic of said [the] system [is determined upon employment of] using said [the] comparison measured data;

c) [d)] determining a test information flow that describes a test dynamic of said [the] system [is determined upon employment of] using said [the] test measured data;

d) comparing said comparison information flow to said test information flow [e) upon employment of] using said [the] comparison information flow and of said [the] test information flow; [,]

e) determining said [the] abnormality to be [is] predicted as established when said [the] comparison information flow differs significantly from said [the] test information flow; [and]

f) determining said [the] abnormality to be [is] predicted as not established when said [the] comparison information flow does not significantly differ from said [the] test information flow.

IN THE ABSTRACT

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On page 12:

cancel lines 2-3;

in line 4, cancel "is" and substitute --and method are-- therefor, and cancel "enables" and substitute --enable-- therefor;